

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known	
			Application Number	10/702,676
			Filing Date	11/6/03
			First Named Inventor	Yi Lu
			Group Art Unit	1635
Examiner Name				
Sheet 1 of 3	Attorney Docket Number 09800240-0078			

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
TV ↓	1	US-5,807,857 718	09-15-1998	Joyce et al.	
	2	US-5,580,967	12-03-1996	Joyce	
	3	US-5,459,040	10-17-1995	Hammock et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Number Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
TV ↓	4	WO 00/26226	05-11-2000	Yale University		<input type="checkbox"/>
	5	GB 2,339,280	01-19-2000	RiboTargets Limited		<input type="checkbox"/>
	6	WO 99/47704	09-23-1999	Jenne et al.		<input type="checkbox"/>
	7	WO 98/49346	11-05-1998	The Scripps Research Institute		<input type="checkbox"/>
	8	WO 98/27104	06-25-1998	Yale University		<input type="checkbox"/>
	9	WO 96/17086	06-06-1996	The Scripps Research Institute		<input type="checkbox"/>
	10	EP 121970	10-17-1984	Daisy Systems Holland B.V.		<input type="checkbox"/>

Examiner Signature	<i>Dorothy Vilemore</i>	Date Considered	11/19/05
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TV	11	International Search Report dated January 15, 2003, for corresponding PCT application number PCT/US01/20557.	
↓	12	BREAKER et al., "A DNA Enzyme that Cleaves RNA," Chem. & Biol., 1994, pp. 223-229, Vol. 1.	
	13	CHARTRAND et al., Biochem., 1997, pp. 3145-3150, Vol. 36.	
	14	FAULHAMMER et al., "Characterization and Divalent Metal-ion Dependence in <i>In Vitro</i> Selected Deoxyribozymes Which Cleave DNA/RNA Chimeric Oligonucleotides," J. Mol. Biol., 1997, pp. 188-202, Vol. 269.	
	15	DEO et al., "A Selective, Ratiometric Fluorescent Sensor for Pb ²⁺ ," J. Am. Chem. Soc., 2000, pp. 174-175, Vol. 122.	
	16	BOUDNA et al., "The Chemical Repertoire of Natural Ribozymes," pp. 222-228, Vol. 418.	
TV	17	GEYER et al., "Lanthanide Probes for a Phosphodiester-Cleaving, Lead-Dependent, DNazyme," J. Mol. Biol., 1998, pp. 483-489, Vol. 275.	
↓	18	GEYER et al., "Evidence for the Metal-Cofactor Independence of an RNA Phosphodiester-Cleaving DNA Enzyme," Chem. & Biol., 1997, pp. 579-593, Vol. 4.	
	19	HOOGSTRATEN et al., J. Mol. Biol., 1998, pp. 337-350, Vol. 284.	
	20	HOOGSTRATEN et al., J. Am. Chem. Soc., 2002, pp. 834-842, Vol. 124.	
	21	KATAHIRA et al., European J. Biochem., 1998, pp. 727-733, Vol. 255.	
	22	KHAN et al., Nucl. Acid. Res., 1996, pp. 3568-3575, Vol. 24.	
	23	KIM et al., J. Biochem., 1997, pp. 1062-1067, Vol. 122.	
	24	KOZUMI et al., Allosteric Selection of Ribozymes That Respond to the Second Messengers cGMP and cAMP," Nature Struct. Biol., 1999, pp. 1062-1071, Vol. 6.	
	25	LEGAULT et al., J. Mol. Biol., 1998, pp. 325-335, Vol. 284.	
	26	LEMIEUX et al., RNA, 1998, pp. 739-749, Vol. 4.	
	27	LI et al., "In vitro Selection and Characterization of a Highly Efficient Zn(II)-Dependent RNA-Cleaving Deoxyribozyme," Nucl. Acid. Res., 2000, pp. 481-488, Vol. 28.	
	↓	28	LIU et al., "A Fiber-Optic Evanescent Wave DNA Biosensor Based on Novel Molecular Beacons," Anal. Chem., pp. 5054-5059, Vol. 71.

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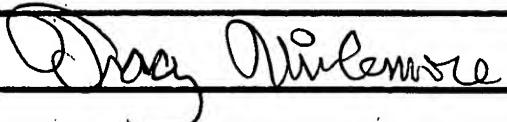
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TV	29	MECKLENBURG et al., Anal. Chimica Acta, 1997, pp. 79-86, Vol. 347.			
	30	MULLAH et al., Tetrahedron Lett., 1997, pp. 5751-5754, Vol. 38.			
	31	NAZARENKO et al., Nucl. Acid. Res., 1997, pp. 2516-2521, Vol. 25.			
	32	OMICHI et al., "Effect of Substrate RNA Sequence on the Cleavage Reaction by a Short Ribozyme," Nucl. Acid Res., 1998, pp. 5655-5661, Vol. 26			
	33	OMICHI et al., Biochem., 1997, pp. 3514-3521, Vol. 36.			
	34	OTA et al., "Effects of Helical Structures Formed by the Binding Arms of DNazymes and Their Substrates on Catalytic Activity," Nucl. Acid. Res., 1998, pp. 3385-3391, Vol. 26.			
	35	POTYRAILO et al., "Adapting Selected Nucleic Acid Ligands (Aptamers) to Biosensors," Anal. Chem., 1998, pp. 3419-3425, Vol. 70.			
	36	SABANAYAGAM et al., "Oligonucleotide Immobilization on Micropatterned Streptavidin Surfaces," Nucl. Acid. Res., 2000, Vol. 28, 4 pages.			
	37	SANTORO et al., "Mechanism and Utility of an RNA-Cleaving DNA Enzyme," Biochem., 1998, pp. 13330-13342, Vol. 37.			
	38	SANTORO et al., "A General Purpose RNA-Cleaving DNA Enzyme," Proc. Natl. Acad. Sci. USA, 1997, pp. 4262-4266, Vol. 94.			
	39	SCOTT, Current Opinion in Structural Biology, 1998, pp. 337-350, Vol. 8.			
	40	STOJANOVIC et al., "Aptamer-Based Folding Fluorescent Sensor for Cocaine," J. Am. Chem. Soc., 2001, pp. 4928-4931, Vol. 122.			
	41	STOJANOVIC et al., "Fluorescence Sensors Based on Aptamer Self-Assembly," J. Am. Chem. Soc., 2000, pp. 11547-11548, Vol. 123.			
	42	STREICHER et al., Nucl. Acid. Res., 1993, pp. 311-317, Vol. 21.			
	43	SUGIMOTO et al., FEBS Lett., 1996, pp. 96-100, Vol. 393.			
	44	WALTER et al., "Folding of the Four-Way Junction of the Hairpin Ribozyme," Biochem., 1998, pp. 17629-17636, Vol. 37.			
	45	WEDEKIND et al., Nature Structural Biology, 1999, pp. 261-268, Vol. 6.			
W	46	WILLIAMS et al., EMBO J., pp. 4551-4557, Vol. 14.			

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